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RefNo	Published	Unpublished	Correspondence	Discrepancy	Title_Descrpt	Subtitle	Author_Co	DocNo	RevNo	RevInfo	DocYear	DocMonth_Day	InfoSource	Summary
C001	❒	❒	■	❒	Group Interview Record of Eugene Sands, Larry Stickel, Harley Toy, Max Berchtold, Mike Failey, and George Kirsch, BCL, conducted by Kevin Peters/Jeff Harrison.		*WASTREN, Inc.*				1998.	May 13.	Created for the Battelle Columbus AK project.	Interview summary of group interview with Eugene Sands, Larry Stickel, Harley Toy, Max Berchtold, Mike Failey, and George Kirsch. Includes notes taken from a very general discussion of operations in JN-1 including chemical use, flow of materials, general operations by area, radionuclides, waste management, and defense-related projects. The information collected was general and used to focus subsequent AK research.
C002	❒	❒	■	❒	Miscellaneous Internal Correspondence for the U.S. Army Project (Project Number G8109).		Battelle Columbus Laboratory.				November 1992 - January 1983.		Battelle Columbus West Jefferson files.	The correspondence includes descriptions of a program conducted for the Army to examine the destruction/immobilization of toxic substances using intense gamma irradiation from Co-60 source in JN-1. Demonstrates that defense related materials from the Army was introduced into JN-1 in 1970.
C003	❒	❒	■	❒	Internal Correspondence from Michael P. Failey to Louis B. Myers.	"Characterization of the JN-1 Hot Cell Waste Drums."	Battelle Columbus Laboratory.				1997.	May 1.	Battelle Columbus West Jefferson files.	The correspondence provides isotopic characterization data for 15 drums of Hot Cell waste materials assayed by a gamma-ray scanning system in 1985 and 1986. Isotopes include only gamma-ray emitting radionuclides and does not quantify any transuranics (Pu, Am).
C004	❒	❒	■	❒	Interview Record of Harley Toy and George Kirsch, BCL, conducted by Kevin Peters.		*WASTREN, Inc.*				1998.	July 13.	Created for the Battelle Columbus AK record.	Interview summary of interview with Harley Toy and George Kirsch. Includes summary of discussions of waste management, shut down of JN-1, operation history, chemical use and defense related work. Includes identification of defense projects from a list of projects (U014) and documentation linking Shippingport work to naval research in JN-1. In the interview, Harley and George verifies that highly enriched uranium (greater than 93%) could only be attributed to naval reactor fuel.
C005	❒	❒	■	❒	Interview Record of Scott Kitts, BCL, conducted by Kevin Peters.		*WASTREN, Inc.*				1998.	July 16.	Created for the Battelle Columbus AK record.	Interview summary of interview with Scott Kitts. Documents that Mr. Kitts identified N-Reactor fuel cladding from a dual purpose Hanford reactor in the Low Level cell. This verifies defense related materials were being tested in JN-1 during the early 1980s.
C006	❒	❒	■	❒	Interview Record of Max Berchtold, BCL, conducted by Kevin Peters.		*WASTREN, Inc.*				1998.	July 15.	Created for the Battelle Columbus AK record.	Interview summary of interview with Max Berchtold. Documents which areas operations identified in the 1970s brochure (P031) were performed, in addition of how materials were introduced into the cells. The composition of the hydraulic oil used to lift the LLC and HLC doors (no PCBs) was discussed (MSDS attached) verifies carbon tetrachloride and benzene used in early operations.
C007	❒	❒	■	❒	Interview Record of Scott Kitts, BCL, conducted by Kevin Peters.		*WASTREN, Inc.*				1998.	July 22.	Created for the Battelle Columbus AK record.	Interview summary of interview with Scott Kitts. Documents that all suspect JN-1 TRU waste in inventory (hoppers and drums) stored at the site was generated in the cells and not mixed with wastes or chemicals from the area supporting the cells.

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C008	❒	❒	■	❒	Memorandum from Thomas A. Baillieul to Mike Brown, DOE/CAO.	"Certification Strategy for Transuranic Waste Generated from the Battelle Columbus Laboratories Decommissioning Project."	DOE Ohio Field Office.				1998.	June 25.	File of James Eide.	This memorandum summarizes the certification strategy for TRU waste generated during the Battelle Columbus Laboratories Decommissioning Project (BCLDP). The memo summarizes BCLDP and provides an estimate of RH and CH waste to be generated by the program. Attachment includes the TRU Waste Certification Program Integrated Schedule (including assumptions and commitments), Certification Strategy, and a memo requesting a small quantity site certification audit.
C009	❒	❒	■	❒	Miscellaneous BMI correspondence.		Various Authors.				February 1956 – October 1968.		Battelle Columbus West Jefferson files.	Miscellaneous correspondence documenting the initial communications associated with naval reactor research (February 1956) and descriptions of navy research conducted in 1966 - 1968. Documents: (1) External correspondence from R. W. Dayton to W. H. Wilson, 2/9/56; (2) Memorandum from R. F. Dickerson to R. W. Dayton, 8/27/56; (3) Memorandum from J. B. Brown to J. W. Ray, 3/22/66; (4) Memorandum from J. B. Brown to J. W. Ray, 9/15/66; (5) Memorandum from J. W. Ray to R. W. Dayton, 10/27/67; (6) Memorandum from J. W. Ray to R. W. Dayton, 10/27/67; (7) Memorandum from D. C. Minton, Jr. to S. J. Paprocki, 10/29/68.
C010	❒	❒	■	❒	Miscellaneous DOE and Battelle Columbus Correspondence.		Various Authors.				November 1985 – December 1995.		DOE Ohio Field Office, Columbus Environmental Management Project Library.	Miscellaneous correspondence relating to discussions of the amount of government research performed by Battelle laboratories, in addition to identifying the responsibility for the cost and management of the D&D operations. Several of the correspondence include attachments estimating the amount of work performed by the DOE, industry, and other government agencies (DOD, Army, Navy, Air Force, NRC). Limited information on where research was performed. Documents: (1) External correspondence from David A. Zorich to Pete Greenwalt, 12/27/95; (2) External Correspondence from J. O. Neff to William Daily, 11/6/91; (3) External correspondence from Jerome R. Bahlmann to Martin A. Langsam, 6/22/87; (4) Memorandum from James W. Vaughan, Jr. to Troy Wade, 8/12/87; (5) DOE Memorandum of Understanding under Contract No. W-7405-Eng-92-M.
C011	❒	❒	■	❒	JN-1 Chemical Use Lists.		Battelle Columbus Laboratories.				1998.	July 24.	George Kirsch, BCL.	This list of chemicals was compiled by reviewing files containing MSDSs for chemicals found in JN-1. The list of chemicals was reviewed by Max Berchtold and Eugene Sands to identify those chemicals used in hot cells.
C012	❒	❒	■	❒	Interview Record of George Kirsch, BCL, conducted by Kevin Peters.		*WASTREN, Inc.*				1998.	July 28.	Created for the Battelle Columbus AK record.	Interview identifies the transfer of metallography operations from alpha/gamma Cell 1 to Cell 10, and identifies the acid used to dissolve burnout fuel in the alpha/gamma cells.

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C013	❒	❒	■	❒	Internal correspondence from D. L. Kidd to A. A. Church.	"Status of TCLP Analysis on Leaded Gloves and Leaded Glovebox Windows."	EG&G Rocky Flats, Inc.				1991.	March 13.	Rocky Flats Acceptable Knowledge source files.	Analytical data for leachable metals in leaded gloves and leaded glass windows.
C014	❒	❒	■	❒	Group Interview Record of Eugene Sands and George Kirsch, BCL, conducted by Kevin Peters.		*WASTREN, Inc.*				1998.	October 22.	Created for the Battelle Columbus AK record.	Interview summary of group interview with Eugene Sands and George Kirsch. This interview was conducted to answer specific questions raised during the first review of the AK document. Interview verified that cyanide will be contained in negligible amounts in the waste; that the Transfer/Storage Pool evaporator was completed in 1989; and that Army chemical agents will not be present in the TRU waste streams.
C015	❒	❒	■	❒	Interview Record of Max Berchtold, BCL, conducted by Kevin Peters.		*WASTREN, Inc.*				1999.	February 19.	Created for the Battelle Columbus AK record.	Discussion of the process used to change-out the JN-1 Pool filter resins.
C016	❒	❒	■	❒	Interview Record of Scott Kitts, BCL, conducted by Kevin Peters.		*WASTREN, Inc.*				1999.	February 24.	Created for the Battelle Columbus AK record.	Discussion of the planned methodology to be used to repackage ion exchange resins and prefilters generated during the change-out of the JN-1 Pool filtering system resin beds in the JN-1 Pump Room.
C017	❒	❒	■	❒	Interview Record of Pete Wilson, Cuno Industrial Filers, conducted by Kevin Peters.		*WASTREN, Inc.*				1999.	March 4.	Created for the Battelle Columbus AK record.	Description of JN-1 Pool filtering system prefilters and estimated composition of the prefilters based on Cuno specifications and information from a Cuno Technical Service representative.
C018	❒	❒	■	❒	Letter of AK Record authored by Kevin Peters.		*WASTREN, Inc.*				1999.	March 5.	Created for the Battelle Columbus AK record.	Estimates of Waste Material Parameter Weights for packaged JN-1 pool filter resins and debris and assigning Matrix Parameter Categories based on manufactures information MSDSs and interviews.
C019	❒	❒	■	❒	Interview Record of Scott Kitts, BCL, conducted by Kevin Peters.		Kevin Peters. *WASTREN,* Inc.				1999.	April 27.	Created for the Battelle Columbus AK record.	This interview focused on the inventory of drums generated during clean-up operations in the CAA and HEC. In addition, a discussion of the planned methodology to be used to repackage these drums of waste, is included.
C020	❒	❒	■	❒	Letter to AK Record.		Kevin Peters. *WASTREN*, Inc.				1999.	May 7.	Created for the Battelle Columbus AK record.	This letter includes the assumptions used in assigning waste streams to the current drum inventory of materials to be repackaged in the Mechanical Test Cell of Building JN-1. The inventory was derived from Waste Packaging Loading Records (see U022) for 60 drums of waste generated during Building JN-1 cleanup campaigns conducted in the mid 1980s in the CAA and HEC.
C021	❒	❒	■	❒	Letter to AK Record.		Kevin Peters. *WASTREN,* Inc.				1999.	May 7.	Created for the Battelle Columbus AK record.	This letter includes the assumptions and the inventory list used in calculating waste stream volumes and estimating waste material parameter categories for the inventory of drums generated during the clean-up of the HEC and CAA. To determine the total volumes of waste generated for each waste stream, volumes for individual items were calculated

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C022	❒	❒	■	❒	Interview Record of Tim Warden, Tri Nuclear Corporation, conducted by Scott Smith.		*WASTREN*, Inc.				1999.	May 10.	Created for the Battelle Columbus AK record.	Tim Warden a Technical Representative with Tri Nuclear Corporation was interviewed to determine the materials of construction for the Tri-Nuc filters used during the cleaning and draining of the Storage/Transfer Pool in JN-1. Also included are the estimates for the Waste Material Parameters for these filters based on the dissassembly and weighing of the materials by BCLDP personnel.
C023	❒	❒	■	❒	Interview Record of Scott Kitts, David Garber, BCL, conducted by Kevin Peters.		*WASTREN, Inc.*				1999.	September 20.	Created for the Battelle Columbus AK record.	This interview focused on the inventory of containers that will be repackaged in the HEC, LLC, and MTC, including the activities planned for each of the cells. Also includes manufacturer's information of the composition of the PolyKlean Blue filter pads contained in the inventory.
C024	❒	❒	■	❒	Letter to AK Record authored by Kevin Peters.	"Analysis of JN-1 Hopper (Casks) and Berry Can Inventory for JN-1 Clean-up Waste Container Repack Process Waste Stream Determination."	*WASTREN, Inc.*				1999.	September 22.	Created for the Battelle Columbus AK record.	This letter includes the assumptions and the inventory lists used in calculating waste stream volumes and estimating waste material parameter categories for the inventory of containers to be repackaged in the MTC, LLC, and HEC. To determine the total volumes of waste generated for each waste stream, volumes for individual items were calculated using the inventory documentation. This information expands of the inventory described in C021.
C025	❒	❒	■	❒	Letter to James H. Eide, BMI, authored by Kevin Peters.	"Research Relating to Work Performed for Hanford in JN-1."	*WASTREN, Inc.*				1999.	October 30.	Created for the Battelle Columbus AK record.	Letter summarizing historical research performed at West Jefferson during the 1970s and 1980s for Hanford. Based on the review of existing AK (C005, P035, P043, P044, U006), defense research includes N-reactor and LOCI programs performed in JN-1.
C026	❒	❒	■	❒	Internal Correspondence from Jim Sarge to James Eide.	"Preparation of Hanford Burial Records for Assayed B25 Waste Boxes."	Battelle Columbus Laboratories.				1999.	April 30.	Created for the Battelle Columbus AK record.	Review of Benchmark Environmental assay data for waste boxes comparing BCLDP JN Standard and pool waste stream models with ORIGEN2 output.
C027	❒	❒	■	❒	Internal Correspondence from Jim Sarge to Craig Jensen.	"TRU Waste Field Sorting Process Surveillance."	Battelle Columbus Laboratories.				1999.	July 19.	Created for the Battelle Columbus AK record.	Summary of surveillance conducted July 12th and 16th to evaluate the level of TRU waste sorting competence. Includes a comparison of the JN Standard and HEC modeled waste streams and a comparison of pool filter and resin assay results.
C028	❒	❒	■	❒	Interview Record of Peter Erickson, BCL, conducted by Kevin Peters.	"Operation of the BCLDP TRU Laundry Decontamination System."	*WASTREN, Inc.*				2000.	April 10.	Created for the Battelle Columbus AK record.	This information supplied by Peter Erickson describes the operation of the BCLDP laundry decontamination unit for TRU mop heads and rags, including the process inputs and process outputs. The composition and volume of the TRU waste streams is estimated.
C029	❒	❒	■	❒	Letter to Kevin J. Peters, *WASTREN, Inc.*, authored by Peter Erickson, BCL.		Battelle Columbus Laboratories.				1999.	December 17.	Created for the Battelle Columbus AK record.	Letter summarizes research performed by Peter Erickson to identify white powder discovered during packaging operations as either soda ash or sodium bicarbonate used in historical operations to neutralize acid. This material was packaged as waste stream 5390-02.

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C030	❒	❒	■	❒	Monthly/Quarterly BCL Letter Reports to COO 1978 – 1982.		Battelle Columbus Laboratories.				1982.	September.	Microfiche 83-02-0184 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Reports describing progress of JN-4 decontamination operations. Includes specific progress descriptions down to glovebox level and indicates TRU versus low-level characterization and waste packaging for some gloveboxes and equipment. Outlines decontamination activities by quarter year.
C031	❒	❒	■	❒	Internal correspondence from Harley L. Toy to Steve Layendecker.		Battelle Columbus Laboratories.				1998.	May 22.	Files of Scott Kitts.	Memorandum providing information in support of disposition of Pu-238 and Pu-239 in inventory at the West Jefferson Site. Included is a description of the inventory, consisting of sealed sources, metal standards, plutonium oxide, and plutonium contaminated wastes from decontamination operations conducted in Building JN-4. Attached is an incomplete inventory for the containers generated in JN-4. The uses of the plutonium described in this reference do not appear to be defense related.
C032	❒	❒	■	❒	Letter from Joseph Dettorre to James Fletcher, DOE Chicago Operations and Regional Office.		Battelle Columbus Laboratories.				1981.	August 25.	Files of Patrick Weaver.	Letter requesting DOE accept radioactive waste for disposal at NTS. The waste was generated from D&D of Battelle's Plutonium Facility. States the Plutonium Facility was engaged in weapons development from 1961-1976. Major quantities of special nuclear materials were processed in a variety of operations including backup production for LLL and Rocky Flats. Identifies prominent isotopes of the waste as Pu^{239}, Pu^{241}, and americium. Does not indicate specific plutonium production or other defense related operations.
C033	❒	❒	■	❒	Letter from Elizabeth Sellers, DOE Richland Operations Office, to Contractors, Richland, Washington.		DOE Richland Operations Office.	96-SFD-059.			1996.	March 14.	Files of Patrick Weaver.	Letter requesting Hanford Site contractors take action to maintain documentation and records necessary for the disposition of spent nuclear fuel (SNF). Attached to this letter is a DOE memorandum providing guidance on defining remote handled transuranic (RH-TRU) waste versus SNF. RH-TRU definition includes irradiated fuel test residues, test materials, and resultant fragments upon which tests are performed. Also included are resultant waste from examinations, and fuel pin fragments and dispersed particulate that cannot be readily retrieved and packaged with fuel assemblies and intact pins. This Attachment is also referenced in the determination for RH-TRU waste provided in *Interim Guidance on Ensuring That Waste Qualifies for Disposal at the Waste Isolation Pilot Plant* (P041).
C034	❒	❒	■	❒	Memorandum from James Boyd, Manager National Spent Fuel Program to Elizabeth Sellers, DOE Richland.		DOE Idaho Operations Office.	OPE-SFP-081.			1997.	March 24.	Files of Patrick Weaver.	Determination by the National Spent Nuclear Fuel Program (NSNFP) for the disposition of three types of material scheduled from removal from Building 327 at the Hanford Site. All three types of material are pieces of SNF determined to meet the classification of RH-TRU waste. These materials were comparable to the materials generated by the Cask Sabotage Project in JN-1.

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C035	❒	❒	■	❒	Letter from Elizabeth Sellers, DOE Richland to H.J. Hatch, Fluor Daniel Hanford, Inc.		DOE Richland Operations Office.	97-SFD-074.			1997.	April 21.	Files of Patrick Weaver.	Letter granting approval to Hanford Site to classify cut fuel elements and fragments as RH-TRU or SNF. Also requires data packages for all the material be maintained to manage it as SNF, if necessary for disposition. These materials were comparable to the materials generated by the Cask Sabotage Project in JN-1.
C036	❒	❒	■	❒	Letter from N.H. Williams, Fluor Daniel Hanford, Inc. to E.D. Sellers, DOE Richland.		Fluor Daniel Hanford, Inc.	FDH-9760793.			1997.	November 17.	Files of Patrick Weaver.	Hanford Site response to DOE Richland guidance regarding classification of cut fuel elements and fragments from Buildings 324 and 327 as RH-TRU versus SNF. Letter affirms these materials will be classified as RH-TRU, and data packages will be maintained should future policy changes necessitate disposition of these materials as SNF. Includes a list of materials and corresponding classifications. These materials were comparable to the materials generated by the Cask Sabotage Project in JN-1.
C037	❒	❒	■	❒	Letter from Elizabeth Sellers, DOE Richland, to H.J. Hatch, Fluor Daniel Hanford, Inc.		DOE Richland Operations Office.	97-SFD-267.			1997.	December 9.	Files of Patrick Weaver.	Letter accepting classifications for the Hanford Site Building 324 and 327 fuel examination legacy material. This letter, in combination with referenced correspondence (OPE-SFP-081, 97-074, FDH-9760793), demonstrates classification of SNF cut elements and fragments from research and testing as RH-TRU waste.
C038	❒	❒	■	❒	Interview Record of Larry Stickel and George Kirsch, conducted by Kevin Peters and Scott Smith.	"Source and Components of Waste From Building JN-4."	*WASTREN, Inc.*				2000.	September 26.	Created for the Battelle Columbus AK record.	Interview documenting source of the Building JN-4 waste currently at Battelle. Documents the waste was generated from D&D of JN-4 and not from historical operations. Mr. Stickle had limited information relating to the historical mission and operations conducted in JN-4.
C039	❒	❒	■	❒	Interview Record of J.B. Williamson, conducted by Kevin Peters and Scott Smith.	"Historical Operations Conducted in JN-4."	*WASTREN, Inc.*				2000.	September 26.	Created for the Battelle Columbus AK record.	Interview documenting some of the historical operations conducted in JN-4. Indicates some nuclear weapons and test shot related projects were conducted in the building. At least one of these projects was conducted for Rocky Flats. Other projects included fabrication of Pu^{238} heat sources and plutonium/uranium nitride fuel for unknown uses. Due to the "need to know" policy, Mr. Williamson had limited information relating to the customers and purpose of his work.
C040	❒	❒	■	❒	Interview Record of David Freas, conducted by Kevin Peters and Scott Smith.	"Historical Operations in Building JN-4."	*WASTREN, Inc.*				2000.	September 29.	Created for the Battelle Columbus AK record.	Interview documenting some of the historical operations conducted in JN-4. Specific work conducted for Lawrence Livermore included maintaining a backup facility for weapons assembly. Indicates waste generated from the facility could contain contamination from any of the projects as gloveboxes were not used exclusively or decontaminated between projects. Also indicates plutonium transferred and shipped to Battelle was handled in JN-4. Mr. Freas had limited recollection of the specific chemicals used in JN-4.

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C041	❒	❒	■	❒	Interview Record of William Pardue, conducted by Scott Smith.	"Historical Operations in Building JN-4."	*WASTREN, Inc.*				2000.	October 2.	Created for the Battelle Columbus AK record.	Interview documenting some of the historical operations conducted in JN-4. Indicates that although the primary mission of the facility was reactor fuel development, approximately 50 percent of the work consisted of research and development of plutonium and metal alloys in support of weapons development. Describes defense related operations conducted for Lawrence Livermore, Rocky Flats, and the Army Reactor Program. Demonstrates waste in inventory could contain contamination from any of the projects as gloveboxes were not used exclusively or decontaminated between projects. Mr. Pardue had limited recollection of the specific chemicals used in JN-4.
C042	❒	❒	■	❒	Letter to AK Record authored by Kevin Peters.	"Assessment of Flammable Volatile Organic Compounds (VOCs)."	*WASTREN, Inc.*				2000.	November 10.	Created for the Battelle Columbus AK record.	Letter documenting the evaluation of flammable VOCs potentially present in Battelle TRU waste. Identifies specific VOCs from AK source documentation and links their use and presence to "new" process streams. Indicates VOCs would not likely be present in most waste streams due to the nature of VOCs, the nature of the waste materials, the VOC use, and the environmental conditions maintained during waste handling operations. The exception is Building JN-4 D&D waste from paint stripping operations.
C043	❒	❒	■	❒	Letter to AK Record authored by Kevin Peters.	"Determination of Waste Material Parameter Weight Percentages of Pool Water Prefilter and Debris for Hanford Waste Profile and Container Data Sheets."	*WASTREN, Inc.*				2001.	January 19.	Created for the Battelle Columbus AK record.	Letter documenting the calculation of waste material parameter weights for pool water prefilter and debris waste based on TRU Waste Loading Records for drums BC0001, BC0009, BC0012, BC0017, BC0021, and BC0024. The waste consists primarily of filters and empty resin bags repackaged in the HEC. Actual material compositions of the filters (as determined in Source Document Reference C018) were used to calculate waste material parameter weight percentages for categories required on Hanford profile documentation for each drum.
C044	❒	❒	■	❒	Letter BCLDP Project Records authored by D. Garber.	"Camera Failure in the HEC TRU Waste Packaging Area & Power Outages."	Battelle Columbus Laboratories.				2000.	May 5.	Created for the BCLDP project records.	Letter documenting the malfunction of one remote HEC camera and the motion/light sensing function. Includes a chronological account of the events occurring during the outage and actions implemented to maintain surveillance of containers in the process of being packaged. Indicates surveillance of the containers was maintained and the integrity of the waste is sound.
C045	❒	❒	■	❒	Interview Record of Pete Erickson, conducted by Scott Smith.	"Description of Pressure Wash Operations and Repackaging of Pressure Wash Filters."	*WASTREN, Inc.*				2001.	April 26.	Created for the Battelle Columbus AK record.	This interview describes an overview of the pressure washing operations conducted in the CAA and LLC, and the repackaging of filters, waste stream 5410-04, generated from in-line wash water filter change out. Identifies the type and quantities of filters currently generated and predicted. constituents.

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C046	❒	❒	■	❒	Letter to AK Record authored by Scott Smith.	"Estimates of Waste Material Parameter Weights for Packaged Pressure Wash Filters and Assignment of Waste Matrix Code."	*WASTREN*, Inc.				2001	May 3.	Created for the Battelle Columbus AK record.	This letter was written to document manufactures information, and interviews to describe the Pressure Wash Filters waste stream, 5410-04, and estimated waste material parameter weight composition. Documents determination of the waste matrix code for the waste stream.
C047	❒	❒	■	❒	Memorandum from Craig Jensen and Jim Sarge to Pete Erickson.	"Findings on the Result of Pressure Wash Decontamination on the JN Waste Matrix."	Battelle Columbus Laboratories.				2000.	July 25.	Files of Pete Erickson.	Memorandum documenting evaluation of samples obtained from pressure washing evolutions, both pre- and post-decontamination to determine gamma emitting, alpha emitting, and TRU isotopes. Indicates pressure washing results in no change in the JN-1 standard isotopic mix. Attached are actual sample results for two pressure wash filters, waste stream 5410-04. Material was analyzed for radionuclides, and not chemical contaminants.
C048	❒	❒	■	❒	Letter from Pete Erickson to Kevin Peters.		Battelle Columbus Laboratories.				1999.	December 17.	Files of Pete Erickson.	Letter describing the identification of white powder in a compacted berry can discovered during repackaging operations in the High Energy Cell. The powder was identified by Larry Stickel as either soda ash or sodium bicarbonate, used in the past for acid neutralization. The material was packaged into the hazardous organic debris waste stream, 5390-02.
C049	❒	❒	■	❒	Miscellaneous Correspondence from Pete Erickson to Dave Garber.		Battelle Columbus Laboratories.				January 2000 – March 2000.		Files of Pete Erickson.	Letters describing the discovery and characterization of miscellaneous materials not anticipated in the Clean-Up Waste Repackaging process description, but discovered during repackaging. Items include insulated wire (packaged into organic debris streams, 5390-01 or 5390-02), a grinding motor and filter media attached to wire mesh (packaged into the hazardous inorganic debris stream, 5190-02), asbestos (packaged into inorganic debris stream, 5190-01), and ALARA paint (packaged into hazardous organic debris stream, 5390-02).
C050	❒	❒	■	❒	Letter to AK Record authored by Scott Smith.	"Estimates of Cellulosic and Plastic Material Compositions for Waste in Compacted Berry Cans from the High Level Cell."	*WASTREN*, Inc.				2001.	June 6.	Created for the Battelle Columbus AK record.	This letter was written to document 2 to 1 ratio of cellulosic and plastic materials in compacted berry can waste based on the High Level Cell berry can inventory data listed in Appendix C of TCP-98-03.1.2. Ratio will only be used for estimating weights of cellulosic and plastic materials in compacted waste during repackaging operations.
C051	❒	❒	■	❒	Letter to AK Record authored by Scott Smith.	"TCLP Analysis of Incandescent, Fluorescent and Mercury Vapor Light Bulbs."	*WASTREN*, Inc.				2001.	July 6.	Created for the Battelle Columbus AK record.	Letter describing analysis results for incandescent, fluorescent and mercury vapor light bulbs. Sampling and analysis was conducted at Rocky Flats Environmental Technology Site. Indicates incandescent light bulbs contain lead over the regulatory limit; and fluorescent and mercury bulbs contain mercury over the regulatory limit. Sample results are attached.
C052	❒	❒	■	❒	Interview Record of Pete Erickson, conducted by Scott Smith.	"Pressure Wash Sludge."	*WASTREN*, Inc.				2001.	August 2.	Created for the Battelle Columbus AK record.	This interview describes the wash water sludge collected on in-line filters, and in the bottom of the 500 gallon settling tank in the CAA. The sludge is included on and will be packaged with the pressure wash filters, waste stream 5410-04.

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D001	❒	❒	❒	■	Telephone Interview Record of Scott Kitts and George Kirsch, conducted by Kevin Peters.	"Discussions about JN-4 Waste Stored in JN-3."	*WASTREN, Inc.*				1998.	July 22.	Created for the Battelle Columbus AK record.	This interview verifies that there is a small inventory of plutonium contaminated waste from D&D of the Plutonium Laboratory JN-4. Previously it had been assumed that the only waste remaining was gloveboxes that would not be disposed of at WIPP. Includes miscellaneous inventory information sent by George Kirsch.
D002	❒	❒	❒	■	Interview Record of George Kirsch, BCL, conducted by Kevin Peters.		*WASTREN, Inc.*				1998.	July 28.	Created for the Battelle Columbus AK record.	Interview summary with George Kirsch discussing the actual date that the HEC and transfer pool were constructed and operational in JN-1. The AK record identifies 1972 and 1975 as the start date.
D003	❒	❒	❒	■	Letter to AK Record authored by Kevin Peters.		*WASTREN, Inc.*				1999.	April 8.	Created for the Battelle Columbus AK record.	This report recalculates the Material Parameter weights for pool filter resin and debris streams assuming a 50/50 mixture of Radsorb and Floor Dry.
D004	❒	❒	❒	■	Telephone Ineterview Record of Cidney Voth, BCL, conducted by Kevin Peters.		*WASTREN*, Inc.				1999.	April 27.	Created for the Battelle Columbus AK record.	This interview was conducted to describe the operations involved with the draining of the JN-1 Transfer/Storage Pool Water and to resolve a discrepancy relating to the date when this activity was completed. In an interview with Gene Sands and George Kirsch (C014) the interviewer was informed that the evaporation of the pool was completed in 1989. Based on review of subsequent AK documentation it was determined that this activity was not completed until the mid 1990s. Cidney Voth was interviewed and documentation provided that verified the operation was performed between 1995 and 1997.
D005	❒	❒	❒	■	Letter to AK Record.		Kevin Peters, *WASTREN*, Inc.				1999.	May 12.	Created for the Battelle Columbus AK record.	This letter was written due to the discovery of analytical data of water from the Transfer/Storage pool prior to removal of the water. The data indicates the presence of low concentrations of lead. Based on this data D008 will be conservatively added to the filter and resin waste streams used to filter the water (3211-01,5410-01, and 5410-02).
D006	❒	❒	❒	■	Letter to AK Record.		Kevin Peters, *WASTREN,* Inc.				1999.	June 29.	Created for the Battelle Columbus AK record.	This letter was written to address the detection of RCRA metals in samples taken of the Tansfer/Storage pool filters and resins. The data indicates the presence of several RCRA metals. Based on this data D004, D005, D006, D007, D008, D009 and D011 will be conservatively added to the filter and resin waste streams used to filter the pool water (3211-01,531—01, and 5410-02).
D007	❒	❒	❒	■	Letter to AK Record.		Kevin Peters, *WASTREN,* Inc.				2000.	November 30.	Created for the Battelle Columbus AK record.	This letter was written to address discrepancies between predicted and actual waste generation parameters for pool filter and debris waste. Actual waste stream generation dates, volumes, waste material parameter distributions, and TRUCON codes were identified through waste container documentation and interviews with waste generation personnel.

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D008	❒	❒	❒	■	Letter to AK Record.		Kevin Peters, *WASTREN,* Inc.				2001.	January 24.	Created for the Battelle Columbus AK record.	This letter was written to address discrepancies between recorded waste packaging and radionuclides as reported in Source Document Reference D007. Actual drum liners used are 110-mil polyethylene. Additional radionuclides including Pu-240, Sr-90, U-233, U-234, U-235, U236, and U-238 were identified based on further evaluation of the waste. This information will be used to update WIPP and Hanford waste profiles for waste stream 5410-01.01.
D009	❒	❒	❒	■	Letter to AK Record.		Kevin Peters, *WASTREN,* Inc.				2001.	May 25.	Created for the Battelle Columbus AK record.	This letter was written to address discrepancies between predicted and actual waste generation parameters for inorganic and organic debris streams (5190-01, 5190-02, 5390-01, and 5390-02). Adjusted waste stream generation dates, volumes, waste material parameter distributions, and TRUCON codes were identified through waste container documentation and interviews with waste generation personnel.
D010	❒	❒	❒	■	Letter to AK Record.		Scott Smith, *WASTREN,* Inc.				2001.	May 25.	Created for the Battelle Columbus AK record.	This letter was written to address the removal of RCRA TC EPA hazardous waste numbers for metals detected in samples taken of the Transfer/Storage pool filters and resins, streams 3211-01, 5410-01, and 5410-02 (see D006), and to correct resin volume estimates. WIPP-WAP and Battelle QAPjP requirements allow for non-hazardous characterization of this waste since TCLP concentrations are below regulatory levels. Radiological characterization of resins, 3211-01, generated as of Novermber 2000 indicate this waste is primarily low-level.
P001	■	❒	❒	❒	Alpha Gamma Cells JN-1A.	Decontamination and Decommissioning Operation.	Myers, Louis B., Eugene II. Sands, Paul A. Tomlin, and William E. Bruce.				1994.	August.	BCL West Jefferson North Historical Files.	This report describes general operations in the 10 Alpha Gamma Cells in the basement of JN-1A, including a description of the cells construction, cell access, and equipment and waste contained in each cell. Operations include metal specimen (Metmounts) grinding, washing, polishing, metallography analysis, production of californium sources, preparation of fuel samples for disposal, thermal conductivity testing, and x-ray diffraction. Attachments include miscellaneous photos, drawings, and narrative (unknown source), in addition to hand-written inventory lists, 1996 update, and a supplement to Battelle's procedure manual for the cells (1964). Limited information relating to specific projects and dates.
P002	■	❒	❒	❒	Fuel Storage Pool, Pump Room and Washdown Room JN-1B.	Decontamination and Decommissioning Operations.	Myers, Louis B., Max B. Berchtold, and James L. Stickel.				1995.	January.	BCL West Jefferson North Historical Files.	This report describes general operations and configuration of the fuel storage pool, pump room, and washdown room in JN-1B. Operations include fuel storage (assemblies, strongbacks, rod bundles, rod holders and tools), deionization of pool water, and washing of casks. Attachments include 1996 update, miscellaneous drawings/photos, and health physics survey reports and data (including isotopics).

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P003	■	❒	❒	❒	High Energy Cell, Mezzanine, and Top of HEC JN-1B.	Decontamination and Decommissioning Operations.	Myers, Louis B., Max B. Berchtold, Paul D. Faust, and Paul A. Tomin.				1994.	December.	BCL West Jefferson North Historical Files.	This report describes general operations and configuration of the mezzanine, high bay, High Energy Cell (HEC), and area above the HEC in the JN-1B. Operations described include receipt and transfer of fuel assemblies into the HEC and transfer of cutup rods to the High Level Cell (HLC). Nondestructive examination, including weighing, dimension measuring, visual examination, photography, and gamma scan. Attachments include a 1996 update, miscellaneous drawings/photos, and health physics survey reports and data (including isotopics). Specific projects are not identified or described.
P004	■	❒	❒	❒	Waste Storage Shed JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., and Max B. Berchtold.				1995.	June.	BCL West Jefferson North Historical Files.	This report describes the contents of the Waste Storage Shed (WSS) behind Building JN-1A. The inventory includes numerous drums and hoppers of waste from the HEC, HLC, and Alpha/Gamma Cell; resin bags from the pool deionizing tanks; and other miscellaneous contaminated items. Attachments include drawings of the WSS, waste location maps, and inventory lists.
P005	■	❒	❒	❒	Hot Cell Purposes and Activities.	Decontamination and Decommissioning Operations.	Battelle Columbus Laboratories.				1997.	September 22.	BCL West Jefferson North historical files.	Very brief and general report (2 pages) describing operations in the High Energy Cell, High Level Cell, Low Level Cell, Mechanical Test Cell, Charpy Room, and Alpha Gamma Cells.
P006	■	❒	❒	❒	Contents of the West Jefferson North Hot Cells and Storage Areas.		Myers, Louis B., Max B. Berchtold, and Eugene H. Sands.				1995.	May.	BCL West Jefferson North historical files.	This report describes the equipment, wastes, supplies, and other contaminated materials contained in the High Energy Cell, High Level Cell, Low Level Cell, Hydraulic Room, Pump Room, Mechanical Test Cell, Charpy Room, and Alpha Gamma Cells.
P007	■	❒	❒	❒	Reactor Pool, Thermal Column, and Contractor Pool in JN-3.	Decontamination and Decommissioning Operations.	Myers, Louis B., and James L. Stickel.				1995.	September.	BCL West Jefferson North historical files.	This report provides a physical and functional description of the concrete structure that houses the remains of the retired research reactor including Reactor Pool, the Thermal Column, and the Contractor (GE) Pool. Describes waste stored in the area. Attachments include photos of the reactor. Specific projects and dates are not identified.
P008	■	❒	❒	❒	West Jefferson North Hopper Location and Contents.	Decontamination and Decommissioning Operations.	Myers, Louis B., and Max B. Berchtold.				1995.	June.	BCL West Jefferson North historical files.	This report describes the contents of 24 waste hoppers stored in JN-3, JN-1B (High Bay), and the Waste Storage Shed. Attachments include logbook entries of specific materials placed into certain hoppers.
P009	■	❒	❒	❒	Chemistry Laboratory, Counting Room and Microprobe Room.	Decontamination and Decommissioning Operations.	Myers, Louis B., Max B. Berchtold, Paul A. Tomin, and Michael P. Failey.				1994.	December.	BCL West Jefferson North historical files.	This report describes the operations and configuration of the Chemistry Laboratory, Counting Room, and Microprobe Room. Operations described include x-ray diffraction, gamma spec, alpha spec, gross alpha/beta, and isotopic analysis. Attachments include a 1996 update and photographs of these areas. Specific projects and dates are not identified.

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P010	■	❒	❒	❒	Evaporator Room JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., Max B. Berchtold, and Paul A. Tomin.				1994.	November.	BCL West Jefferson North historical files.	This report describes the purpose and configuration of the Evaporator Room adjacent to the Charpy Room in JN-1A. Operations include an evaporator tank that produced sludge evaporated from liquids from the Radiological Analytical Laboratory, Hot Sump, hot drain sump (behind the Machine Shop), and drains from the CAA and OBD. Attachments include a 1996 update, health physics survey reports and data, and a certificate of analysis for TCLP of the sludge (1993).
P011	■	❒	❒	❒	Controlled Access Area Storage Rooms JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., Max B. Berchtold, Paul D. Faust, and Paul A. Tomin.				1994.	October.	BCL West Jefferson North historical files.	This report describes the contents of the two storage rooms located to the east of the Controlled Access Area. Attachments include a health physics survey report and data, and a hand-written report of the contents of the rooms.
P012	■	❒	❒	❒	Controlled Access Area JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., Max B. Berchtold, Paul D. Faust, and Paul A. Tomin. West Jefferson North historical files.				1994.	September.	BCL West Jefferson North historical files.	This report describes the Controlled Access Area (CAA) that provided support to the High Level Cell, Low Level Cell, and Mechanical Test Cell. Operations included staging and transferring materials between cells, service and repair manipulators, and performing special projects. The Sabotage Program performed in this area (1981-1983) is also described. Attachments include a 1996 update and health physics survey reports and data.
P013	■	❒	❒	❒	Mezzanines JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., and Max B. Berchtold.				1994.	September.	BCL West Jefferson North historical files.	This report describes the mezzanine areas above the High Level Cell, Low Level Cell, and the Mechanical Test Cell. These areas contain the ventilation and filtering systems for these cells. Attachments include a 1996 update.
P014	■	❒	❒	❒	Mechanical Test Cell JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., Carl A. Redd, Sr., and Max B. Berchtold.				1994.	July.	BCL West Jefferson North historical files.	This report describes the purpose and background of the Mechanical Test Cell (MTC) used primarily for tensile testing. Other analyses performed in this cell include creep, vacuum fusion, burst, radial burnup, density, and expanding mandrel testing. Attachments include a 1996 update, photographs, hand-written calculations of isotope content (Co-60 and Sb-125), and waste can volume.
P015	■	❒	❒	❒	High Level Cell and Low Level Cell Hydraulic Doors and Hydraulic Door Room JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., and Max B. Berchtold.				1994.	September.	BCL West Jefferson North historical files.	This report describes the configuration and operation of the High Level and Low Level hydraulic doors, in addition the hydraulic fluid and contamination on the floor of the Hydraulic Room below the doors. Attachments include drawings and diagrams of the area and a health physics survey report and data.
P016	■	❒	❒	❒	Subcells of the High Level and Low Level Cells in JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., Max B. Berchtold, and Paul A. Tomin.				1994.	November.	BCL West Jefferson North historical files.	This report describes the subcells below the High Level and Low Level Cells. The subcells are used for storage of used HEPA filters and were used historically for creep testing. Attachments include a 1996 update, drawings and diagrams of the area and a health physics survey report and data, in addition to a drawing showing hydraulic oil seeping into the area from the Hydraulic Room.

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P017	■	❒	❒	❒	Low Level Cell JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., Max B. Berchtold, Thomas A. Beddick, Paul D. Faust, and Paul A. Tomin.				1994.	August.	BCL West Jefferson North historical files.	This report describes the operations and configuration of the Low Level Cell (LLC) in JN-1A. Projects included fuel cutting, grinding, tensile tests of cobalt samples, and gamma scanning of waste containers filled in the HLC. Attachments include a 1996 update, logbook pages describing the packaging of approximately 100 waste (berry) cans (December 1988 to February 1989), logbook pages of a study verifying the contents of the containers (July 1991), and radioassay results. Limited information relating to projects and dates.
P018	■	❒	❒	❒	High Level Cell JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., Max B. Berchtold, Paul D. Faust, and Paul A. Tomin.				1994.	August.	BCL West Jefferson North historical files.	This report describes the operations and configuration of the High Level Cell (HLC) in JN-1A. Operations described include cutting irradiated fuel sections and defueling fuel rod sections. Attachments include a 1996 update, lists of materials and equipment stored in the cell, and a letter discussing material lost during the Sabotage Project. Limited information relating to projects and dates.
P019	■	❒	❒	❒	Charpy Room JN-1A.	Decontamination and Decommissioning Operations.	Myers, Louis B., Carl A. Redd, Sr., Max B. Berchtold.				1994.	June.	BCL West Jefferson North historical files.	This report describes operations and materials stored in the Charpy Room in JN-1A. Operations described include sheer testing of irradiated specimens and cleaning of samples. Attachments include a 1996 update, drawings and diagrams of the area, and a health physics survey report and data. Limited information relating to projects and dates.
P020	■	❒	❒	❒	Curie Content Determination and Package Classification of Low-Level Waste at Battelle's Hot Cell.		Failey, Michael P.				1986.	June 11.	BCL West Jefferson North historical files.	This report describes the procedures and methods used to determine the curie content and classification of low-level waste packages generated at Battelle's hot cell, including the identification of gamma-emitting radioisotopes.
P021	■	❒	❒	❒	Draft Report on the Characterization of Remote Handled TRU Waste Packages by Gamma-Ray Spectroscopy.		Failey, Michael P., Ph.D.				1992.	October 5.	Battelle Columbus West Jefferson files.	Gamma-ray spectroscopy was used to measure the amount of gamma-ray emitting radioisotopes present in waste generated in the hot cells and combined with ratios obtained from a computer code to calculate the amount of TRU radionuclides present in the waste packages. Also included are a general hot cell facility description, year operations ceased, how the wastes were packaged during cleanup activities, instrumentation used to measure the radioactive contamination, and system calibration, validation, and verification.
P022	■	❒	❒	❒	Appendices for the Intensive Audit Report for the Hot Cell.		Author Unknown.				1969.	August.	Battelle Columbus West Jefferson files.	Applications for radioisotopic procurement and/or use for items transferred from the Research Reactor (JN-3) to JN-1. The document describes movement of capsules and other reactor materials from JN-3 to JN-1 during the 1967-1969 time frame.
P023	■	❒	❒	❒	Course 7: Metals for Nuclear Power.	Lesson Ten: Structural Materials.	Metals Engineering Institute.				Copyright 1958.		Battelle Columbus West Jefferson files.	One of a series of correspondence course pamphlets relating to metals used for the nuclear power industry. Useful as a reference for the structural metals used in nuclear reactors especially zirconium.

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P024	■	❒	❒	❒	Procedures Manual for Battelle's Radioisotope, Gamma, and Hot-Cell Laboratories.		Sunderson, Duane N., and John E. Gates.	BMI-PM-662.	Rev. 3.		1965.	November 24.	Battelle Columbus West Jefferson files.	Document describing Battelle's radioisotopes, gamma, and hot-cell laboratory operations and West Jefferson and King Avenue. Provides maps and floor plans of the facilities and brief descriptions of operations in JN-1 in 1965.
P025	■	❒	❒	❒	Miscellaneous Materials Safety Data Sheets (MSDSs).		Authored by Manufacturers.						Battelle Columbus West Jefferson files.	Miscellaneous MSDS sheets collected from numerous sources collected during AK research at the West Jefferson site.
P026	■	❒	❒	❒	The U.S. Government and Battelle, Partners in Nuclear Research, 1943 – Present.		Battelle Columbus Laboratories.				1985.		Battelle Columbus West Jefferson files.	Document prepared primarily from thousands of questionnaires sent to Battelle Memorial Institute employees in 1985. The document describes the involvement of BMI in atomic research and development at several facilities. Includes a history of Battelle's involvement and the scope of operations performed in JN-1 and the amount of work performed for the DOE and other customers. The report does not specifically identify work performed for defense-related government work and focuses on special nuclear material projects.
P027	■	❒	❒	❒	Battelle Columbus Laboratory Decommissioning Project.	West Jefferson Category 1 and 3 Low-Level Waste Summary.	Battelle Columbus Laboratory.	100-00, 101-00.	Rev. 5.		1997.	July 25.	Battelle Columbus West Jefferson files.	Summary of decommissioning project at West Jefferson including an historical overview and physical and radiological characterization of compactible and noncompactible waste from JN-1, JN-2, and JN-3. The report focuses on low-level waste and does not distinguish between wastes generated from JN-1, JN-2, and JN-3.
P028	■	❒	❒	❒	Shipping/Receiving Records for U.S. Air Force Project (Project Number G7656-3).		Battelle Columbus Laboratory.				1967.	October.	Battelle Columbus West Jefferson files.	Radioactive Material Receipt documents receipt of reactor material from Sundance Air Force Station to JN-1. Demonstrates that defense related materials from the Air Force was introduced into JN-1 in 1967. The document gives no details relating to the scope of the project.
P029	■	❒	❒	❒	Shipping/Receiving Records for U.S. Army Project.		Battelle Columbus Laboratory.				1970.	November/ December.	Battelle Columbus West Jefferson files.	Radioactive Shipment and Receipt form and other documents that show the receipt of reactor material from the Army MH-1A reactor to JN-1. Demonstrates that defense related materials from the Army were introduced into JN-1 in 1970.
P030	■	❒	❒	❒	Hot-Laboratory Facility and Summary of Capabilities.		Battelle Memorial Institute.				Date Unknown.		Battelle Columbus West Jefferson files.	Brochure describing capabilities of the JN-1 Hot Cell Laboratory published before 1975, because HEC capabilities are not included. Includes description of the facility, projects and methods used in the hot cells.
P031	■	❒	❒	❒	Battelle Hot Cell Laboratory Brochure.		Battelle Columbus Laboratory.				Date Unknown.		Battelle Columbus West Jefferson files.	Brochure describing capabilities of the JN-1 Hot Cell Laboratory published after 1975, because HEC capabilities are described. Includes description of the facility, projects and methods used in the hot cells. Does not identify where the different methods are performed.

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P032	■	❒	❒	❒	Procedures Manual for Battelle's Radioisotope, Gamma, and Hot-Cell Laboratories.		Sunderson, Duane N., and John E. Gates.	BMI-PM-662 (Rev.)			1962.	February 20.	Battelle Columbus West Jefferson files.	Document describing Battelle's radioisotopes, gamma, and hot-cell laboratory operations and West Jefferson and King Avenue. Provides maps and floor plans of the facilities and brief descriptions of operations in JN-1 in 1962 before the construction of the Alpha/Gamma cells. The procedure also describes a Waste Disposal Area that was never constructed in the basement of JN-1.
P033	■	❒	❒	❒	Decontamination of Battelle Columbus' Plutonium Facility.	Final Report to U.S. DOE Chicago.	Rudolph, Ann, George Kirsch, and Harley L. Toy.				1984.	November 12.	Battelle Columbus West Jefferson files.	This report summarizes the decontamination and decommissioning of the Plutonium Laboratory. The report includes a historical description of the facility and operations. In addition, the report documents that all waste generated by the program was shipped off site.
P034	■	❒	❒	❒	Finding of No Significant Impact and Environmental Assessment.	Battelle Columbus Laboratories Decommissioning Project.	U.S. DOE Chicago Operations Office.				1990.	June.	Battelle Columbus West Jefferson files.	This FONSI includes the Environmental Assessment and describes the proposed actions and DOE responsibility for the D&D of 15 Battelle Columbus Laboratories. Provides brief descriptions of West Jefferson North operations.
P035	■	❒	❒	❒	Representative Battelle-Columbus Projects with the Department of Energy, 1980–Present.		Battelle Columbus Laboratories.				1985.		Battelle Columbus West Jefferson files.	This report provides a list and brief descriptions of nuclear, materials/process, fossil fuel, biomass/solar, and environmental studies performed for the DOE by Battelle from 1980 to 1985. The report does not identify the specific facilities supporting the projects.
P036	■	❒	❒	❒	Battelle-Columbus 40 Years of Energy Research for the U.S. Government.		Battelle Columbus Laboratories.				1985.		Battelle Columbus West Jefferson files.	This report provides an overview of operations and the historical missions of Battelle-Columbus. Provides a brief description of JN-1 operations and describes defense related Army, Navy, and Air Force Programs. General overview that does not identify the facility where the research was conducted.
P037	■	❒	❒	❒	Decontamination Work Plan for Building JN-1 (partial document).		Battelle Columbus Laboratories.				1990.	November.	DOE Ohio Field Office, Columbus Environmental Management Project Library.	This portion of the work plan describes the hydraulic oil leak in the Hydraulic Room below the Low Level and High Level cells and provides an elevation drawing of the cell doors in these cells.
P038	■	❒	❒	❒	Battelle Columbus Laboratory Decommissioning Project Baseline.		Battelle Columbus Laboratories.				1992.	November.	DOE Ohio Field Office, Columbus Environmental Management Project Library.	This portion of this document provides a brief history of Battelle Columbus Laboratories and a history of special nuclear material flow for the 15 buildings to be decontaminated and decommissioned. Information is extremely brief.
P039	■	❒	❒	❒	SCS-300 Operating Manual.		Bartlett Services, Inc.				1998.		Cidney Voth's files.	This operating manual describes the operations of the SCS-300 Sonatol cleaning system equipment. The manual also provides a summary of the theory of the systems operations.

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P040	■	❒	❒	❒	Waste Characterization, Classification and Shipping Support Technical Basis Document for the Battelle Columbus Laboratories Decommissioning Project (BCLDP) West Jefferson North Facility.		Battelle Columbus Laboratories.	DD-98-04.	Rev. 0.		1998.	May.	Files of James Eide.	This report describes the methods used to identify and quantify the isotopes present in waste generated in JN-1. The report provides a radioisotope distribution based on smear samples taken from surface contamination in the Controlled Access Area (CAA). Since the CAA historically supported operations in all the cells, samples of contamination should be very representative of the general distribution of isotopes in JN-1 (see C004).
P041	■	❒	❒	❒	Interim Guidance on Ensuring that Waste Qualifies for Disposal at the Waste Isolation Pilot Plant.		U.S. DOE Carlsbad Area Office.				1997.	February 13.	Battelle Columbus West Jefferson files.	This interim guidance was developed to assist the TRU waste sites in establishing and demonstrating that only TRU waste generated by atomic energy defense activities is certified for disposal at WIPP.
P042	■	❒	❒	❒	Decontamination and Decommissioning Operations Hot Laboratory Operating Procedure.	Changing Resins and Filters in JN-1B Pump Room.	Berchtold, Max B.	HL-OP-010.	Revision 1.		1993.	June 4.	Created for the Battelle Columbus AK record.	Procedure describing the method used to change out the resins in the JN-1 Pool Filtering System, including inputs, outputs, and packaging descriptions.
P043	■	❒	❒	❒	Final Report on Research to Develop and Evaluate effects of Hydrogen on Irradiated Pressure Tube Toughness.		Lowry, L. M., A. A. Lawrence.				1986.	August 15.	Created for the Battelle Columbus AK record.	This report and attachments documents research performed for Battelle Pacific Northwest Division on N-reactor pressure tubs. This research was defense related and documents the receipt, storage, and examination of these materials from 1981 to 1986. Additionally, the report documents that these materials were stored in the Transfer/Storage Pool supporting the defense waste determination for the pool resins and other related streams.
P044	■	❒	❒	❒	Final Report on Research to Develop and Evaluate effects of Hydrogen on Irradiated Pressure Tube Toughness.		Lowry, L. M.	G0664-0010(382).			1987.	September 28.	Created for the Battelle Columbus AK record.	This report and attachments documents research performed Battelle Pacific Northwest Division on N-reactor pressure tubes. This research was defense related and documents the receipt, storage, and examination of these materials as late as 1987. Additionally , the report documents that these materials were stored in the Transfer/Storage Pool supporting the defense waste determination for the pool resins and other related streams.
P045	■	❒	❒	❒	Decontamination and Decommissioning Operations, Decontamination and Decommisioning Operating Procedure, Operation of the Underwater Vacuum System UFV-100 (DD-OP-315).		Battelle Columbus Laboratories.				1995.	August 24.	Battelle Columbus West Jefferson files.	Procedure describing the method used to filter/vacuum the JN-1 Transfer/Storage Pool. Also attached is Revision 0 of this procedure (September 12, 1991) that was never implemented.

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P046	■	❒	❒	❒	Assembly and Operating Instructions, Underwater Filter/Vacuum Units (Models UFV-100 & UFV-260).		Tri Nuclear Corporation.				1994.	December 16.	Battelle Columbus West Jefferson files.	Manufacturers instructions for operating the equipment used to filter/vacuum the JN-1 Transfer/Storage Pool. Includes drawings and specifications for the Tri-Nuc filters (waste stream 5410-01).
P047	■	❒	❒	❒	Decontamination and Decommissioning Operations, Health Physics Operating Procedure, Removal of Objects From Contaminated Pools and Tanks (HP-OP-031).		Battelle Columbus Laboratories.				1996.	March 14.	Battelle Columbus West Jefferson files.	Procedure describing the method used to remove objects from the bottom of the JN-1 Transfer/Storage Pool prior to vacuuming and draining.
P048	■	❒	❒	❒	PolyKlean Blue Filter Information Sheet.		Authored by Manufacturer.				Date Unknown.		Files of Pete Erickson.	Manufacturer's information identifying the filter media of the PolyKlean Blue filters as polyester fibers.
P049	■	❒	❒	❒	Rosedale High-Efficiency Liquid Filter Bag Information Sheet.		Authored by Manufacturer.				Date Unknown.		Files of Pete Erickson.	Manufacturer's information identifying the filter media of the Rosedale POMF filter used by the BCLDP laundry operation as polypropylene. This filter will be contained in waste stream 5410-03.
P050	■	❒	❒	❒	Operation of the TRU Level Mop Head Decontamination Unit.	Waste Management and Transportation Operating Procedure.	Battelle Columbus Laboratories.	TC-OP-01.6.	Revision 0.		2000.	February 25.	Battelle Columbus Waste Jefferson files.	Procedure describing the methodology used to operate and maintain the Donini TRU mop head decontamination unit. Procedure describes the process inputs and management of the outputs generated by this operation.
P051	■	❒	❒	❒	Computest Instruction Manual.		Donini International.				1995.		Battelle Columbus Waste Jefferson files.	Manufacturer's instructions for operating the Donini Computest 2000 laundry systems. Includes sytem drawings and schematics. Manual describes solvent dry cleaning operation of the unit. BCLDP utilizes water washing system in accordance with TC-OP-01.6 (P050).
P052	■	❒	❒	❒	Plan for Fully Decontaminating The Battelle Plutonium Laboratory.		Battelle Columbus Laboratories.				1978.	May 1.	Microfiche 83-01-0013 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Plan describing tasks necessary for complete decontamination of the Plutonium Facility, Building JN-4. Includes a facility layout with specific gloveboxes identified, task based decommissioning strategy, description of waste generating processes, types of TRU waste generated, waste categorization and management schemes, radionuclides anticipated, and estimated waste volumes. Does not identify specific decontamination agents.
P053	■	❒	❒	❒	Topical Report on Decontamination of Plutonium-Contaminated Glove Boxes.		D.E. Stellrecht, D.G. Freas, and J.F. Dettorre.				1979.	June.	Microfiche 83-02-0185 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Report describing JN-4 glovebox detergent decontamination techniques, resulting contamination levels, and evaluation of contamination fixation agents. Includes decontamination agents used, description of decontamination process, liquid waste solidification agent, and final approved contamination fixation agent. Does not provide resulting contamination levels for all gloveboxes. Indicates paint stripping was conducted for some gloveboxes, but all are not identified.

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P054	■	❒	❒	❒	Topical Report on Volume Reduction Experiment (I) At Battelle's Plutonium Facility.		J.F. Dettorre, D.G. Freas, and D.E. Stellrecht.				1979.	February 23.	Microfiche 83-01-0015 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Report describing volume reduction process for one glovebox of the Plutonium Facility, Building JN-4. Includes descriptions of airborne contamination control tent, glovebox volume reduction methodology, tools and personal protective equipment used, waste packaging and resulting waste volume. Report does not indicate if this method was used for all gloveboxes decommissioned in JN-4.
P055	■	❒	❒	❒	Fiscal Year 1978 Summary Report on Decontamination Of Battelle-Columbus' Plutonium Facility.		W.J. Madia, J.F. Dettorre, D.G. Freas, and D. Stellrecht.				1979.	September 28.	Microfiche 83-01-0016 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Report describing decommissioning and decontamination activities completed in Building JN-4 as of September 1978. Includes brief descriptions of items removed from gloveboxes, size reduction equipment and techniques necessary to remove large items, glovebox cleaning, decontamination of Gloveboxes 5, 33, and 41, volume reduction of Glovebox 5, waste packaging, and surface soil sampling in the vicinity of the Liquid Waste Holding System. Does not include inventory of items removed from specific gloveboxes.
P056	■	❒	❒	❒	Quality Assurance Document.	Stripping Paint From The Interior Of Gloveboxes.	D.E. Stellrecht.	Pu-DP-1.4.	0.		1978.	May 22.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedure for stripping paint from the interior of contaminated gloveboxes. Includes paint stripping agent and equipment to be used, methodology for stripping paint, and waste packaging. Does not indicate specific gloveboxes requiring paint stripping.
P057	■	❒	❒	❒	Quality Assurance Document.	Loading Of TRU-Contaminated Waste In DOT 7A Steel Boxes (ANL-M-III).	D.E. Stellrecht.	Pu-DP-2.4.	1.		1979.	March 9.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedure for loading TRU-contaminated waste into DOT 7A steel boxes (ANL-M-III). Includes inner packaging requirements, box weight and gram fissionable material limits, and methodology for packing wood-lined and unlined boxes. Provides a list of prohibited items such as free liquids. Does not list specific adhesives for sealing wood liner lids.
P058	■	❒	❒	❒	Quality Assurance Document.	Retrievable TRU-Contaminated Waste Packaging In Molded Polyethylene-Lined DOT 17C Steel Drums.	D.E. Stellrecht.	Pu-DP-1.6.	1.		1978.	December 6.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedure for loading TRU-contaminated waste into DOT 17C steel drums. Includes inner packaging requirements, heat generation and gram fissionable material limits, and methodology for packing and closing drums. Provides a list of prohibited items such as free liquids. Does not list specific adhesives for sealing polyethylene liner lids.
P059	■	❒	❒	❒	Quality Assurance Document.	Detergent Cleaning And Rinsing Of The Interior Of Gloveboxes.	D.E. Stellrecht.	Pu-DP-1.8.	0.		1978.	October 10.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedure for cleaning the interior of gloveboxes. Includes specific detergents, foaming agent and defoaming agent, equipment required, methodology for cleaning and sampling wash and rinse solutions, and liquid waste solidification.

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P060	■	❒	❒	❒	Quality Assurance Document.	Fixation Of Residual Radioactive Contamination On Glovebox Interior Surfaces.	J.S. Furr.	Pu-DP-1.9.	0.		1978.	October 19.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedure describing the application and evaluation methodology for fixation of radioactive particulates on glovebox interior surfaces. Specifies product used for coating surfaces.
P061	■	❒	❒	❒	Quality Assurance Documents.	Glovebox Volume Reduction Sectioning Procedures. Disconnection Of Gloveboxes From Stands.	D.E. Stellrecht.	Pu-DP-4.3, Pu-DP-4.7.	0.		1978.	November 9.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedures describing the methodology for dismantling and size reducing gloveboxes into sections for packaging in Type M-III boxes or 55-gallon drums. Lists of tools and equipment are provided including polyethylene wash bottles. Do not designate wetting agent to be used in the wash bottles.
P062	■	❒	❒	❒	Quality Assurance Document.	Handling And Packaging Of Glovebox Sections For Disposal.	D.E. Stellrecht.	Pu-DP-4.8.	0.		1978.	November 9.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedure describing the methodology for handling, wrapping, characterization, and packaging sections of volume reduced gloveboxes. Includes a list of packaging materials and requires weighing and inventory of each waste item, as well as segregation of combustibles from non-combustibles. Does not define combustibles.
P063	■	❒	❒	❒	Quality Assurance Document.	Removal And Packaging Of Glovebox Exhaust Filters.	D.E. Stellrecht.	Pu-DP-4.2.	0.		1978.	October 30.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedure describing the methodology for removing and packaging glovebox filters. Indicates filters were removed after glovebox interior was coated with a fixative, and prior to volume reduction. Packaged filters segregated from other waste pending assay. Does not indicate if filters were segregated from other waste items during final packaging and disposal.
P064	■	❒	❒	❒	Quality Assurance Documents.	Construction Of Glovebox Volume Reduction Tents. Dismantling Of Glovebox Volume Reduction Tent.	J. Wissinger and D.E. Stellrecht.	Pu-DP-4.1, Pu-DP-4.9.			1979.	March 7.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedures describing the methodology for systematically constructing and dismantling contamination control tents around gloveboxes undergoing volume reduction. Includes descriptions of tent construction materials, tent dismantling tools and equipment, personal protective equipment used, contamination survey method, and waste packaging. Does not indicate specific paint used for contamination control on wood framing. Source includes Revision 0, November 9, 1978 and Revision 1, March 3, 1979 of Pu-DP-4.1, and Revision 0, November 10, 1978 of Pu-DP-4.9.

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P065	■	❒	❒	❒	Quality Assurance Documents.	Health Physics Procedures For Entering Tent Area III For Volume Reduction Of Gloveboxes. Procedures For Exiting Glovebox Volume Reduction Tent Areas III, II, And I.	J. Wissinger.	Pu-DP-4.4, Pu-DP-4.5.			1978.	November 16.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedures describing the methodology for donning and doffing personal protective equipment necessary for technicians and attendants conducting glovebox volume reduction and personal decontamination operations. Includes equipment, personal protective equipment used, and contamination survey methods. Demonstrates no decontamination or fixation agents were used. Source includes Revision 1, November 16, 1978 of Pu-DP-4.4, and Revision 0, November 9, 1978 of Pu-DP-4.5.
P066	■	❒	❒	❒	Quality Assurance Documents.	Ceiling Tile and Supporting Framework Removal and Packaging As Low Level Radioactive Waste. Glovebox Exhaust Systems Removal And Packaging As Low Level Radioactive Waste. Gas And Liquid Supply And Electrical Systems Removal And Packaging As Low Level Radioactive Waste.	C.G. Postle and B.E. White.	Pu-DP-7, Pu-DP-8, Pu-DP-9.	0.		1980.	February 19.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedures describing the methodology for dismantling gas, liquid, electrical, and exhaust systems external to gloveboxes, as well as room ceiling tile and framework. Includes equipment, personal protective equipment used, contamination survey methods, and waste packaging. Indicates contamination of these materials was controlled by disposal rather than wet decontamination, and some waste may be characterized as TRU based on contamination surveys conducted during dismantling operations.
P067	■	❒	❒	❒	Quality Assurance Documents.	Preparation Of Items To Be Assayed Using The Random Source Interrogation System. Operation Of The Random Source Interrogation System.	William R. Mouser.	Pu-DP-1.5, Pu-DP-7.	0.		1979.	March 13.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedures describing item preparation for assay and operation of the Random Source Interrogation System. Document method for assay of individual items shorter than 42 inches. Include method for calculating total plutonium content based on Pu-240 count and plutonium lot concentration. Provide table with Pu-240 concentration according to lot. Do not indicate ratios of other plutonium isotopes or uranium isotopes.
P068	■	❒	❒	❒	Quality Assurance Documents.	Operation Of The Davidson 1056 Multichannel Analyzer For Assaying Contaminated Gloveboxes.	William R. Mouser and D.E. Stellrecht.	Pu-DP-3.2.	2.		1979.	May 2.	Microfiche 83-01-0029 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Procedure describing operation of the Multichannel Analyzer for determination of TRU contamination levels and waste categorization. Documents method for assay of interior glovebox surfaces. Includes methods for calculating total plutonium content, Pu-238, Pu-239, and Am-241 contents. Does not indicate ratios of plutonium isotopes or uranium isotopes.
P069	■	❒	❒	❒	Environmental Assessment Decommissioning And Decontamination Program Battelle Plutonium Facility.		U.S. Department of Energy, Battelle Memorial Institute Columbus Division.	DOE/EA-0092.			1979.	September.	Microfiche 83-01-0017 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Report describing anticipated impact to the local environment from radioactive contaminants potentially released during decommissioning of Building JN-4. Includes a detailed description of the Plutonium Facility physical location and layout, and documents construction and operation dates. Also includes a brief description of the facility mission. Does not provide specific project information or operations history.

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P070	■	❒	❒	❒	Renewal Application For Combined Special Nuclear Material And Byproduct License.	Section 2. Plutonium Laboratory.	Battelle Columbus Laboratories.				1977.	September.	Microfiche 83-02-0183 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Section 2 of the application specific to Building JN-4. Includes a brief description of the Plutonium Facility, radiological safety elements and facility operations procedures. Operations procedures are not specific to a process or operation, but are general such as glovebox bag out and bag in operations, glove change out, etc. Includes a general definition of hazardous materials with examples of types potentially present. Does not indicate specific chemical or product names.
P071	■	❒	❒	❒	Interim Report on Shipping Cask Sabotage Source Term Investigation to U.S. Nuclear Regulatory Commission.		E.W. Schmidt, M.A. Walters, M.E. Balmert, and B.D. Trott.				1979.	November 6.	Battelle Columbus West Jefferson files.	Report detailing efforts conducted in Phase I of Battelle's Shipping Cask Sabotage Source Term Investigation program. Phase I includes specification of a reference base incident, scaling considerations, and test system design. Documents the simulated mode of attach and weapons used, scaled fuel and casks to be evaluated, and design of the testing apparatus. Specifies fuel material used consists of five irradiated fuel rods from the H.B. Robinson Unit 2 pressure water reactor. Included with the report are drawings and miscellaneous correspondence relative to the design of the test apparatus and test fuel materials.
P072	■	❒	❒	❒	Final Report on Shipping Cask Sabotage Source Term Investigation to U.S. Nuclear Regulatory Commission.		E.W. Schmidt, M.A. Walters, B.D. Trott, and J.A. Gieseke.				1982.	September.	Battelle Columbus West Jefferson files.	Report detailing data collection and results of experiments conducted for Battelle's Shipping Cask Sabotage Source Term Investigation program. Includes a description of apparatus preparation, experimental variations, data collection, results, scaling analysis, and result implications. Indicates post-test fuel pins and remaining debris were packaged between test shots by open transfer from the sample chamber.
P073	■	❒	❒	❒	Plutonium Procedures Manual.		Battelle Columbus Laboratories.				1969.	July.	George Kirsch Historical Files.	Procedure describing the Plutonium Laboratory, Building JN-4, and materials control and handling procedures for the facility. Includes descriptions of metallurgical and analytical equipment, general operational capabilities, and the composition and layout of gloveboxes and glovebox lines. Identifies the Wet Chemistry glovebox, however, chemicals used are not noted. Operations are described in the context of nuclear fuel research and development and does not specifically indicate weapons related activities.
P074	■	❒	❒	❒	Post-Remedial-Action Radiological Survey Report For The Plutonium Facility Of The Battelle Memorial Institute Columbus Division West Jefferson Complex West Jefferson, Ohio.		Occupational Health And Safety Division. Health Physics Section. Argonne National Laboratory, Argonne, Illinois.	ANL-OHS/HP-85-103.			1982.	June.	George Kirsch Historical Files.	Report describing three radiological surveys conducted from April 1980 to June 1982 throughout the Plutonium Laboratory, Building JN-4, during D&D operations. Provides activity data for survey locations, and radionuclide and isotopic analytical results for selected samples. Includes maps noting sample and survey locations. Demonstrates potential radionuclides present in waste from the facility. Indicates Pu^{238} and other plutonium isotopes were co-mingled. Does not provide the specific isotopic ratios contained in current JN-4 waste inventory.

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P075	■	❒	❒	❒	Acceptable Knowledge Summary. Pool Water Prefilter and Debris.		*WASTREN*, Inc.				2000.	November 30.	Created for the Battelle Columbus AK record.	Acceptable Knowledge summary for the pool water prefilter and debris waste stream, profile number BC5410-01.01. Includes tabulated waste stream data necessary for completion of the waste stream profile form as well as brief descriptions of the physical waste form, areas of operation, and generation processes. Summary does not include headspace gas confirmatory testing.
P076	■	❒	❒	❒	Acceptable Knowledge Summary. Pool Water Prefilter and Debris.		*WASTREN*, Inc.				2001.	January 19.	Created for the Battelle Columbus AK record.	Revised Acceptable Knowledge summary for the pool water prefilter and debris waste stream, profile number BC5410-01.01. Includes all parameters addressed in Source Document Reference P075 as well as additional radionuclides identified by further evaluation of radiological sampling data. Summary does not include headspace gas confirmatory testing.
P077	■	❒	❒	❒	Operation and Maintenance of the Alkota Pressure Washer.		Battelle Columbus Laboratories.	WA-OP-061.	3.		2001.	March 6.	Battelle Columbus Waste Jefferson files.	Procedure describing the methodology used to operate and maintain the Alkota Pressure Washer. Procedure includes description of process inputs as well as the wash water management system.
P078	■	❒	❒	❒	Operation of CAA Pressure Wash System.		Battelle Columbus Laboratories.	WI-976.	2.		2000.	November 30.	Battelle Columbus Waste Jefferson files.	Work instruction describing implementation of Alkota Pressure Wash system to decontaminate materials from areas adjacent to the CAA including the MTC, HESR, LLC, and HLC. Describes collection and handling of wash water, including filtration and transfer.
P079	■	❒	❒	❒	Material Removal from the High Level Cell (HLC).		Battelle Columbus Laboratories.	WI-1021.	0.		2001.	February 2.	Battelle Columbus Waste Jefferson files.	Work instruction describing actions necessary to segregate, stage, and remove non-HLC component material from the HLC in preparation for gross decontamination of the floor using the Alkota Pressure Washer system. Demonstrates items pressure washed must meet specific criteria and HLC floor is vacuumed and mopped prior to washing to remove potential hazardous constituents.
P080	■	❒	❒	❒	Low Level Cell Gross Decontamination and Support Functions.		Battelle Columbus Laboratories.	WI-1026.	1.		2001.	February 26.	Battelle Columbus Waste Jefferson files.	Work instruction describing actions necessary to conduct gross decontamination of the LLC using the Alkota Pressure Washer system. Indicates removal, vacuum cleaning, and special cleaning operations conducted prior to gross decontamination. Also includes diagrams showing locations in CAA for wash cabinet and wash water transfer drums.
P081	■	❒	❒	❒	Packaging of Transuranic Waste in the Mechanical Test Cell Addendum 1.		Battelle Columbus Laboratories.	WI-956.			1999.	March 19.	Battelle Columbus Waste Jefferson files.	Work instruction for Building JN-1 pool resin and pool filter waste packaging activities in the Mechanical Test Cell. Indicates sorting, sampling, packaging, and documentation operations conducted. Includes bulleted list of steps for taking composite samples of pool resin and filters. Indicates samples were for alpha and gamma spectroscopy.

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P082	■	❒	❒	❒	Radiation and Contamination Survey Techniques.		Battelle Columbus Laboratories.	HP-OP-019.	2.		1999.	July 28.	Battelle Columbus Waste Jefferson files.	Provides guidelines for performance and documentation of radiation and contamination surveys of work areas and equipment. This procedure is used in collecting smear samples for isotopic analysis for confirmation of radionuclides in TRU waste; however, the purpose is primarily for direct reading analysis for contamination levels and dose.
U001	❒	■	❒	❒	Miscellaneous Maps of Battelle Columbus West Jefferson Facility.		Battelle Columbus Laboratories.				Date Unknown.		Fax from Jim Eide, BCL.	Maps provide a layout of the West Jefferson site and the JN-1, JN-2, and JN-3 facilities. The map of JN-1 includes the HEC, pool, and High Bay.
U002	❒	■	❒	❒	Description of the Battelle Hot Cell Laboratory.		Battelle Columbus Laboratories.				Date Unknown.		Battelle Columbus West Jefferson files.	Summary of operations in the JN-1 hot cells including the HEC, LLC, HLC, MTC, and alpha gamma cells, including a three-dimensional diagram of the cells. The source of the document is unknown and provides no historical operational information.
U003	❒	■	❒	❒	Battelle-Columbus Hot Cell Laboratory - Capability Summary.		Battelle Columbus Laboratories.				Date Unknown.		Battelle Columbus West Jefferson files.	Summary of JN-1 capabilities and operational history. The source of this document is unknown and must have been written after 1972, but before 1975, because it does not include a description of the HEC capabilities.
U004	❒	■	❒	❒	Buildings JN-1, JN-2, and JN-3 Summaries.		Battelle Columbus Laboratories.				Date Unknown.		Battelle Columbus West Jefferson files.	Historical dates and brief history bullets for JN-1, JN-2, and JN-3. Dates are useful for creating a chronology of the history of operations at the site. Limited information relating to specific operations.
U005	❒	■	❒	❒	DOE Contract Log.						1975 - 1987.		Battelle Columbus West Jefferson files.	Log book documents transfers of materials from Battelle relating to various defense-related Army and Air Force projects. There is no way to determine if any of these materials originated from JN-1, however the enriched uranium project for Babcock and Wilcox Company, Naval Nuclear Fuel Division was likely conducted in JN-1 based on conversations with Harley Toy.
U006	❒	■	❒	❒	ENG-92 Contract Projects Database 1 Printout.						1985.	Query Date May 20.	Battelle Columbus West Jefferson files.	Printout of the database created for the reference *The U.S. Government and Battelle, Partners in Nuclear Research* (P026). The printout provides a list of DOE, other government, and industrial contracts supported by Battelle from 1943 through 1985. Includes project number, date, funding, principal investigator, and scope. This list does not directly identify where the research project was conducted.
U007	❒	■	❒	❒	Volume Estimates for Potential TRU Contents at WJN.		Battelle Columbus Laboratories.				Date Unknown.		Battelle Columbus West Jefferson files.	This table estimates the volume and type of potentially TRU waste contained in JN-1 cells, and other areas in JN-1 and JN-3. The volumes are rough estimates based only on visual observations and does not identify all materials that are included.
U008	❒	■	❒	❒	Nuclear Fuel Inventory at West Jefferson North.		Battelle Columbus Laboratories.				Date Unknown.		Battelle Columbus West Jefferson files.	Inventory of nuclear fuel material located in JN-1 and JN-3, including cemented slugs of burn-up solution cemented in Alpha/Gamma Box 7. Information verifies that the cement slugs are primarily power reactor material.

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U009	❒	■	❒	❒	Miscellaneous JN-1 Waste Inventory Data.		Battelle Columbus Laboratories.				1988 - 1997.		Battelle Columbus West Jefferson files.	This source consists of a number of inventory lists and Waste Package Loading Records describing the materials in drums and berry cans, including pool resins (with MSDS) and filters. Includes radiochemistry results for Tri-Nuc filters used to filter JN-1 pool water and an internal memo describing the method used to analyze the filters. This source contains information that can be used to describe the materials that may be contained in the TRU waste streams.
U010	❒	■	❒	❒	Hot Cell Receipts and Shipments Log Book.		Battelle Columbus Laboratories.				3/21/60 – 5/14/73.		Battelle Columbus West Jefferson files.	This JN-1 logbook documents receipt and shipment of irradiated materials. The logbook identifies numerous shipments of highly enriched uranium (navy reactor) fuel (see C004) into and out of the Hot Cell Laboratory from 1960 through 1969.
U011	❒	■	❒	❒	Battelle Memorial Institute Laboratory Record Book of BMI Reports, No. 13561.		Battelle Columbus Laboratories.				June 1957 – December 1960.		Battelle Columbus West Jefferson files.	This Battelle Memorial Institute Logbook records the identification numbers assigned to BMI research reports, in addition to the author(s), report date, and distribution (1957-1960). The log documents that a majority of the reports and drafts were destroyed and unavailable. The log lists ongoing naval reactor research, however it does not identify where the research was conducted.
U012	❒	■	❒	❒	Battelle Memorial Institute Laboratory Record Book of BMI Reports, No. 18423.		Battelle Columbus Laboratories.				July 1959 – June 1968.		Battelle Columbus West Jefferson files.	This Battelle Memorial Institute Logbook records the identification numbers assigned to BMI research reports, in addition to the author(s), report date, and distribution (1959-1968). The log documents that a majority of the reports and drafts were destroyed and unavailable. The log lists ongoing naval reactor research, however it does not identify where the research was conducted.
U013	❒	■	❒	❒	Battelle Memorial Institute Laboratory Record, Book of BMI Reports, No. 13117.		Battelle Columbus Laboratories.				December 1960 – August 1965.		Battelle Columbus West Jefferson files.	This Battelle Memorial Institute Logbook records the identification numbers assigned to BMI research reports, in addition to the author(s), report date, and distribution (1960-1965). The log documents that a majority of the reports and drafts were destroyed and unavailable. The log lists ongoing naval reactor research, however it does not identify where the research was conducted.
U014	❒	■	❒	❒	ENG-92 Contract Projects Database 2 Printout.		Battelle Columbus Laboratories.				1986.	Query Date October 17.	Battelle Columbus West Jefferson files.	Printout of the database created for the reference *The U.S. Government and Battelle, Partners in Nuclear Research* (P026). The printout provides a list of DOE, other government, and industrial contracts supported by Battelle from 1943 through 1985. Includes project number, dates, scope, and nuclear material type. Also includes group notes prepared by Harley Toy describing assumptions made for this database. Unlike U006 this reference identifies the building where the research was conducted and specifically identifies naval reactor research being conducted in JN-1 (see C004).

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RefNo	Published	Unpublished	Correspondence	Discrepancy	Title_Descrpt	Subtitle	Author_Co	DocNo	RevNo	RevInfo	DocYear	DocMonth_Day	InfoSource	Summary
U015	❒	■	❒	❒	Miscellaneous Documentation describing Radioanalytical Laboratory Operations.		Battelle Columbus Laboratories.				1997 – 1998.		Files of Timothy J. Snider, RAL Manager.	Miscellaneous sources of information describing the mission and operations in the Radioanalytical Laboratory (RAL) in JN-2, including a list of procedures, pages from the RAL Administrative Operating procedure, and a RAL quality assurance discussion from the 1996 BCLDP Site Environmental Report.
U016	❒	■	❒	❒	Nuclear Materials Questionnaires.		Battelle Columbus Laboratories.				1985.		Battelle King Avenue Records Management Office files.	These Nuclear Materials Questionnaires were distributed during research conducted for *The U.S. Government and Battelle, Partners in Nuclear Research* (P026) and identify defense related programs conducted in JN-1. This information was compiled in the database queried for reference U014. These forms document ongoing naval reactor research; however they provide very limited project information.
U017	❒	■	❒	❒	Summary Report of Battelle 741 Reports.		Battelle Columbus Laboratories.				1998.	March/June.	DOE Chicago Operations Office; Safeguards and Security Division classified files.	Available reports were compiled by Kathy Hall (CEMP) and Craig Jensen during review of 741 shipping reports stored in classified files in DOE Chicago. Information includes shipment numbers, shipper, receiver, material type/description, date, weight, project number, and other miscellaneous information. The information in the reports was reviewed for classification and was cleared for uncontrolled distribution. Based on a review performed by George Kirsch, none of the material could be linked to operations in JN-1.
U018	❒	■	❒	❒	Battelle Columbus Laboratories Decommissioning Project (BCLDP); DCLDP Hot Cell Facility Presentation.		Battelle Columbus Laboratories.				1995.	July.	DOE Ohio Field Office, Columbus Environmental Management Project Library.	1995 presentation describing the BCLDP program associated with the JN-1 Hot Cell Laboratory. Provides a summary of the program history, JN-1 history and map and brief summaries and drawings of the cells.
U019	❒	■	❒	❒	Miscellaneous JN-1 Construction Detail Reports.		Battelle Columbus Laboratories.				1997.		Battelle Columbus West Jefferson files.	Construction detail reports for the High Energy Cell, Hydraulic Door Room, Low Level Subcell, Mechanical Test Cell, Low Level Cell, High Level Cell, and the JN-1 Pool and Sumps. Most of this information is duplicated in references P002, P003, P014, P015, P016, P017, and P018. No operations or waste information is contained in these reports.
U020	❒	■	❒	❒	DOE/Battelle Cost Share – Scope July, 1997.		Battelle Columbus Laboratories.				1997.		Ohio Field Office CEMP Library.	This document describes the history and responsibilities of Battelle, NRC, and DOE for the D&D of Battelle Laboratories.
U021	❒	■	❒	❒	TCLP metals data for leaded glass.		Rocky Flats Environmental Technology Site.				1998.	July.	Rocky Flats Acceptable Knowledge source files.	Analytical data for TCLP leachable metals in glass windows. Demonstrates leaded glass leaches at regulated levels for lead.
U022	❒	■	❒	❒	Waste Package Loading Record.		Battelle Columbus Laboratories.				1997-1999.		Battelle Columbus West Jefferson files.	The Waste Package Loading Records describe the contents of 60 drums of waste generated by clean-up operations in the CAA and HEC. These records will be used to determine the waste streams to be generated during repackaing, including volume, matrix parameter category, and waste material parameter for each stream.

AK Source Document Reference Number Log

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U023	❒	■	❒	❒	Requisition for Purchase, 55-gallon Steel Drum Liners.		Battelle Columbus Laboratories.				1999.	February 18.	Battelle Columbus West Jefferson files.	This requisition for the 55-gallon drum liners includes the specification for the liners to be used to package and compact TRU waste.
U024	❒	■	❒	❒	Removal Of Special Nuclear Materials From The Plutonium Laboratory.		R.E. Snider				1978.	December 6.	Microfiche 83-01-0026 attached to *Decontamination of Battelle-Columbus' Plutonium Facility*, source document P033.	Draft report on plutonium and uranium inventory reduction in Building JN-4 as a result of removal operations conducted through September 1978. Indicates several programs and the associated gloveboxes containing plutonium or uranium prior to implementation of removal operations. Does not address all of the gloveboxes in the facility, and does not indicate prior work conducted in the addressed gloveboxes.
U025	❒	■	❒	❒	Actinide screen data for radionuclides contained in strippable paint from JN-1 Charpy Cell.		Battelle Columbus Laboratories.				2000.	July 17.	Files of Pete Erickson.	Actinide screen of ALARA paint samples from the wall and floor of the Charpy Cell in Building JN-1. The paint was contaminated during visual examination of waste originally generated from D&D of Building JN-4. Results indicate the waste is contaminated with Pu^{238} and Pu^{239}.
U026	❒	■	❒	❒	69 Sample Basis of DD-98-04 Technical Basis Document.		Battelle Columbus Laboratories.				2001.	May 25.	Files of Jim Sarge.	Analytical data for 69 radiological samples taken throughout Building JN-1. The data is the analytical basis for the JN-1 standard isotopic mixture documented in DD-98-04, *Waste Characterization, Classification, and Shipping Support Technical Basis Document*. Analysis limited to radionuclide isotopic concentrations.
U027	❒	■	❒	❒	Cask Smear Sample Data for Isopotic Confirmation.		Battelle Columbus Laboratories.				2001.	August 20.	Battelle Columbus Laboratories.	Analysis data from waste storage cask smear samples taken from casks in Building JN-1. The data is used for the confirmation of radionuclides of the JN-1 standard isotopic mixture. Includes Excel spreadsheet containing the data. Analysis limited to radionuclide isotopic activity per sample and samples taken from storage vessels not specific waste items.